Cyfoeth Naturiol Cymru Natural Resources Wales	EPR Compliance Assessment Report	Report ID: AP3139FT/0254282

This form will report compliance with your permit as determined by an NRW officer

Site	Five Fords WwTW CHP Facility				Permit Ref	AP3139FT		
Operator/ Permit holder	Dwr Cymru (Welsh Water)							
Date	24/11/2015				Time in	10:00	Out	15:30
What parts of the permit were assessed	1.1.1, 2.3.3, 4.2, 4.3							
Assessment	Audit	EPR Activity:	Installation	X	Waste Op		Water Discharge	
Recipient's name/position	Jonathon Dean							
Officer's name	Julia Frost				Date issued	15/12/2015		

Section 1 - Compliance Assessment Summary

This is based on the requirements of the permit under the Environmental Permitting Regulations. A detailed explanation and any action you may need to take are given in the "Detailed Assessment of Compliance" (section 3). This summary details where we believe any non-compliance with the permit has occurred, the relevant condition and how the non-compliance has been categorised using our Compliance Classification Scheme (CCS). CCS scores can be consolidated or suspended, where appropriate, to reflect the impact of some non-compliances more accurately. For more details of our CCS scheme, contact your local office.

Permit Conditions and Compliance Summary			Condition(s) breached
a) Permitted activities	**1**. Specified by permit	N	
b) Infrastructure	**1.** Engineering for prevention & control of pollution	N	
	2. Closure & decommissioning	N	
	3. Site drainage engineering (clean & foul)	N	
	4. Containment of stored materials	N	
	5. Plant and equipment	N	
c) General management	**1**. Staff competency/ training	N	
	2. Management system & operating procedures	C3	1.1.1 a
	3. Materials acceptance	N	
	4. Storage handling, labelling, segregation	N	
d) Incident management	**1**. Site security	N	
	2. Accident, emergency & incident planning	N	
e) Emissions	**1.** Air	N	
	2. Land & Groundwater	N	
	3. Surface water	N	
	4. Sewer	N	
	5. Waste	N	
f) Amenity	**1**. Odour	N	
	2. Noise	N	
	3. Dust/fibres/particulates	N	
	4. Pests, birds & scavengers	N	
	5. Deposits on road	N	
g) Monitoring and records, maintenance and reporting	**1**. Monitoring of emissions & environment	N	
	2. Records of activity, site diary, journal & events	N	
	3. Maintenance records	N	
	4. Reporting & notification	N	
h) Resource efficiency	**1**. Efficient use of raw materials	N	
	2. Energy	N	

KEY: **C1, C2, C3, C4** = CCS breach category **(* suspended scores are marked with an asterisk),**
A = Assessed (no evidence of non-compliance), **N** = Not assessed, **NA** = Not Applicable, **O** = Ongoing non-compliance – not scored

Number of breaches recorded	1	**Total compliance score** (see section 5 for scoring scheme)	4

If the Total No Breaches is greater than zero, then please see Section 3 for details of our proposed enforcement response

Section 2 – Compliance Assessment Report Detail

This section contains a report of our findings and will usually include information on:

- the part(s) of the permit that were assessed (e.g. maintenance, training, combustion plant, etc)
- where the type of assessment was ‘Data Review’ details of the report/results triggering the assessment
- any non-compliances identified
- any non-compliances with directly applicable legislation
- details of any multiple non-compliances
- information on the compliance score accrued inc. details of suspended or consolidated scores.
- details of advice given
- any other areas of concern
- all actions requested
- any examples of good practice.
- a reference to photos taken

This report should be clear, comprehensive, unambiguous and normally completed within 14 days of an assessment.

The scope of the audit was to assess the adequacy of the Environmental Management System (EMS) at the Gas to Grid / CHP Plant at Five Fords. In particular concentrating on reviewing the relevant procedures in relation to training, maintenance, reporting, notification and waste.
The audit was mainly office based, with a discussion with one of the Operatives on the plant in the afternoon.

Process Overview

The site permit was recently varied to add in a new listed activity – 1.2 A(1) (a) (*refining gas where this is likely to involve the use of 1,000 or more tonnes of gas in any 12 month period*). Prior to this the CHP had been permitted under EPR as a waste operation. The CHP are now included in the installation permit as a directly associated activity.
Biogas, produced at the currently exempt AD plant on site, is upgraded for injection to the national gas grid (the listed activity) or used to produce heat and power (the CHP plant).

- Biogas produced in the AD plant is stored in the Biogas Bag
- Siloxane plant to remove siloxanes (two plant - one used for 24 hours whilst other recharges)
- Gas then splits depending on whether going to CHP or gas to grid
- Gas to CHP needs no further treatment. CHP used to provide the heat to site and electricity to the grid
- Gas going to Gas Grid requires further treatment.
- Pressurised before it passes through 4 carbon filters in series. First two remove VOCs and siloxanes, second two hydrogen sulphide.
- The gas is then compressed, cooled and dried before passing through a series of membranes.
- These membranes separate the methane from the carbon dioxide.
- The carbon dioxide is emitted via emission point A6.
- The methane passes through the membranes before being upgraded for entry to the grid.
- Propane is added to increase the calorific value and an odorant is added.

The gas to grid is now fully commissioned and operational. However, it is currently only operating at a fraction of its design capacity (about a sixth).

1. **Environmental Management System (Condition 1.1.1)**

Welsh Water have an accredited ISO 14001 system which covers the waste water treatment facilities and anaerobic digestion but not the gas to grid activity.
The permit application states that *there are documented procedures for maintenance of the BUP units and for the monitoring of emissions or impacts relevant to the site included in the EMS and documented procedures.*
The EP OPRA for the gas to grid states that DCWW have a ISO 14001 system to cover the permitted activities. As this is not yet the case the EP OPRA spreadsheet should be updated to reflect the current situation at the permitted activity at Five Fords.
A Corrective Action Log exists for all internally and externally generated actions. The Ops Coordinator is responsible for tracking the North East areas action on this list, assigning responsibility and ensuring actions are carried out within given timescales.

Two documents have been produced which are relevant to the Gas to Grid Facility – an Environmental Management Plan and an Emergency Procedure. As the ISO 14001 does not cover the Gas to Grid these are the only documents that appear to have been produced to ensure that DCWW secure compliance with condition 1.1.1 of the permit
1.1.1 The operator shall manage and operate the activities:
(a) In accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints
(b) using sufficient competent persons and resources.
As, in the short term at least, it is not the intention to extend the ISO 14001 EMS to cover the Gas to Grid, improvements are required to these documents in order to comply with condition 1.1.1.

Maintenance

The Gas to Grid Environmental Management Plan does not cover maintenance in any detail. This may be covered in the Operating and Maintenance Manual, however, evidence to demonstrate this was not provided during the audit.
A SAP system is used to record statutory maintenance (not environmental). A number of maintenance contracts are in place – ie on the siloxane plant, carbon filters – no evidence was provided during the audit that this is documented anywhere.
There are a number of monitors on site analysing the gas quality to ensure the plant is operating correctly. There are a number of automatic shutdowns in place should certain conditions occur (ie too much H_2S, membranes blocked).
The Operator does not appear to have produced a list of environmental critical equipment – ie equipment that if it breaks down has a potential to impact on permit compliance.
Recommendation – a list of environmentally critical equipment should be produced.

Training

There are only a few staff working at the Gas to Grid Plant. Only one operative is currently able to make adjustments to the gas to grid operations. Other staff are able to start or shutdown the system but not to make adjustments.
A series of training sessions are in the process of being rolled out to relevant staff. To date there has been no specific training on environmental permit compliance, although generic environmental training has been given.
There are two operatives on site at any time during the day. Out of hours any alarms would be picked up by the central DCWW control room and forwarded to the standby officer.
Task cards are in the process of being produced for the Gas to Grid Plant – these are already used in other parts of the business. These will detail, in easy steps, daily / weekly / monthly checks that must be carried out. An example of this is on the carbon filters samples will be taken at three different heights on the filter to assess whether it is operating correctly.

Whilst it is recognised that the Gas to Grid activity is relatively new and systems are in the process of being produced, the existing management plan does not include a sufficient level of detail to secure compliance with the environmental permit.
The existing system should therefore be reviewed and updated. The format of the EMS is up to the operator but it must include procedures that are robust enough to secure compliance with the permit conditions. It should also assign responsibility for the different aspects. It is may be beneficial to follow the same format for the Gas to Grid as for the already accredited aspects of DCWW business.
Some of these documents may already exist but it was not possible to locate them during the audit. If you wish to refer to other documents within the relevant EMS this is acceptable, as long as all the information is accessible to relevant staff.

Breach permit condition 1.1.1 (a) - CCS category 3 breach.
Action – update EMS by end March 2016. An aspects register should be produced, significance test (hazard, likelihood, consequence under normal and abnormal / emergency conditions) undertaken and an action plan implemented.
Action – update EP OPRA spreadsheet and send to Natural Resources Wales by 15 January 2016.
Recommendation - As part of the ongoing training a session should be run on the environmental permit and how the relevant operatives' roles can impact upon compliance. All relevant training should be documented and refresher periods set.

2. Reporting (section 4.2)

It is the responsibility of the DCWW Compliance Team to ensure that all reports required by the environmental permit are submitted to Natural Resources Wales as per the permit requirements. Whilst the Environmental Management Plan covers some of the reporting requirements it does not cover all of them or assign responsibility or include details on when the reports are due.
A Corrective Action Log exists for all internally and externally generated actions. The Ops Coordinator is responsible for tracking the North East areas action on this list, assigning responsibility and ensuring actions are carried out within given timescales.
Recommendation - a tracking schedule is produced which includes all of the reporting requirements of the Environmental Permit, and this is updated once submissions are made.

3. Notifications (section 4.3)

The Environmental Management Plan mentions the requirement to notify Natural Resources Wales using a schedule 5 notice but it does not assign responsibility, give details of what type of issue would need to be reported or include all of the relevant timescales from section 4.3 of the permit.
Advised during the audit that any notifications (part A or B) would come through the Catchment Coordinator. This is not documented anywhere.
Recommendation - the sites' environmental management system should include a procedure relating to the notification requirements set out in section 4.3 of the permit. It is recommended that a few examples are included of the types of issue that need notifying.

4. Waste (condition 2.3.3)

Given the nature of the activities at the Gas to Grid Plant and the fact that it is relatively new, very little waste has been produced to date.
Systems are in place within DCWW so that they have a directory of approved suppliers "Contract and Framework Directory". Therefore, when a waste is produced only certain companies are able to collect and dispose of the waste. It is the responsibility of a central team to ensure that

the companies have the relevant permits to accept the waste. A Contract Manager will be assigned to each company and it is their responsibility to ensure that the relevant permits are in place and remain in place for the extent of the contract.

Duty of Care notes are kept in folders in the office at Five Fords. Each company has their own folder.

There is an internal e-learning course that covers waste and Duty of Care Notes.

Recommendation – The existence of the Directory and the Contract Managers' responsibility for ensuring only suitably permitted companies are used in relation to waste disposal should be included with in the updated EMS.

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Operator/ Permit	Dwr Cymru (Welsh Water)	Date	24/11/2015

Section 3- Enforcement Response **Only one of the boxes below should be ticked**	
You must take immediate action to rectify any non-compliance and prevent repetition. Non-compliance with your permit conditions constitutes an offence and can result in criminal prosecutions and/or suspension or revocation of a permit. Please read the detailed assessment in Section 2 and the steps you need to take in Section 4 below.	
Other than the provision of advice and guidance, at present we do not intend to take further enforcement action in respect of the non-compliance identified above. This does not preclude us from taking enforcement action if further relevant information comes to light or advice isn't followed.	
In respect of the above non-compliance you have been issued with a warning. At present we do not intend to take further enforcement action. This does not preclude us from taking additional enforcement action if further relevant information comes to light or offences continue.	x
We will now consider what enforcement action is appropriate and notify you, referencing this form.	

Section 4- Action(s)

Where non-compliance has been detected and an enforcement response has been selected above, this section summarises the steps you need to take to return to compliance and also provides timescales for this to be done.

Criteria Ref.	**CCS Category**	**Action Required/Advised**	**Due Date**
See Section 1 above			
C2	C3	Review, update and implement EMS to cover the permitted activities. *(An aspects register should be produced, significance test (hazard, likelihood, consequence under normal and abnormal / emergency conditions) undertaken and an action plan implemented.)*	31/03/2016

Section 5 - Compliance notes for the Operator

To ensure you correct actual or potential non-compliance we may

- advise on corrective actions verbally or in writing
- require you to take specific actions in writing
- issue a notice
- require you to review your procedures or management system
- change some of the conditions of your permit
- decide to undertake a full review of your permit

Any breach of a permit condition is an offence and we may take legal action against you.

- We will normally provide advice and guidance to assist you to come back into compliance either after an offence is committed or where we consider that an offence is likely to be committed. This is without prejudice to any other enforcement response that we consider may be required.
- Enforcement action can include the issue of a formal caution, prosecution, the service of a notice and or suspension or revocation of the permit.

See our Enforcement and Civil Sanctions guidance for further information

This report does not relieve the site operator of the responsibility to

- ensure you comply with the conditions of the permit at all times and prevent pollution of the environment
- ensure you comply with other legislative provisions which may apply.

Non-compliance scores and categories

CCS category	Description	Score
C1	A non-compliance which could have a **major** environmental effect	60
C2	A non-compliance which could have a **significant** environmental effect	31
C3	A non-compliance which could have a **minor** environmental effect	4
C4	A non-compliance which has **no** potential environmental effect	0.1

Operational Risk Appraisal (Opra) - Compliance assessment findings may affect your Opra score and/or your charges. This score influences the resource we use to assess permit compliance.

Section 6 – General Information

Data protection notice

The information on this form will be processed by the Natural Resources Wales (NRW) to fulfill its regulatory and monitoring functions and to maintain the relevant public register(s). The NRW may also use and/or disclose it in connection with:

- offering/providing you with its literature/services relating to environmental matters
- consulting with the public, public bodies and other organisations (e.g. Health and Safety Executive, local authorities) on environmental issues
- carrying out statistical analysis, research and development on environmental issues
- providing public register information to enquirers
- investigating possible breaches of environmental law and taking any resulting action
- preventing breaches of environmental law
- assessing customer service satisfaction and improving its service
- Freedom of Information Act/Environmental Information Regulations request.

The NRW may pass it on to its agents/representatives to do these things on its behalf. You should ensure that any persons named on this form are informed of the contents of this data protection notice.

Disclosure of information

The NRW will provide a copy of this report to the public register(s). However, if you consider that any information contained in this report should not be released to the public register(s) on the grounds of commercial confidentiality, you must write to your local area office within twenty working days of receipt of this form indicating which information it concerns and why it should not be released, giving your reasons in full.

Customer charter

What can I do if I disagree with this compliance assessment report?

If you are unable to resolve the issue with your site officer, you should firstly discuss the matter with the officer's line managers. If you wish to raise your dispute further through our official Complaints and Commendations procedure, phone our general enquiry number 0300 065 3000 (Mon to Fri 08.00–18.00) and ask for the Customer Contact team or send an email to enquiries@naturalresourceswales.gov.uk. If you are still dissatisfied you can make a complaint to the Public Services Ombudsman for Wales. For advice on how to complain to the Ombudsman phone their helpline on 0845 607 0987.